1. In an axial vane rotary device including a stator with a cylindrical internal chamber defined by an stationary annular outer housing, two end walls that define inwardly facing annular cam surfaces, an inner housing, a rotor, a driveshaft therefor journaled in said inner housing, said rotor being provided with a plurality of angularity spaced apart axial slots in each of which is slideably disposed a vane having a radially outer edge, a radially inner edge and side edges, a fixed inner housing in which said drive shaft is journeled and a fixed outer housing defined by said annular outer wall of said stator, the invention comprising:

an improved vane comprising at least two independent sections, each said section being independently movable with respect to said other sections thereby to improve sealing between said vane and a wall of said chamber.

2. The improved vane of claim 1 wherein said vane comprises two sections, each of said sections being mirror images of the other and each including a radially inner end, a radially outer end, a cam follower edge and an opposite edge, said opposite edges of said sections being juxtaposed, said sections being axially independently movable.

3. The improved vane of claim 2 wherein during operation of said axial vane rotary device said opposite edges of said sections are urged axially away from each other and said cam follower edge of each of said sections being contiguous with said cam surface of a corresponding end wall.

4. The improved vane of claim 1 wherein at least one spring member under compression is disposed between said sections to normally urge the sections axially away from one another.

5. The improved vane of claim 4 wherein each said spring member is a coil spring having opposite end portions, said opposite edge of each said vane section having a socket aligned with a corresponding socket in said other vane, said end portions of said spring member being received in said sockets to retain said spring member between said sections, said spring members being maintained under compression by contact of said cam follower edge of each of said sections against its respective annular cam surface.

6. The improved vane of claim 1 wherein said vane defines a pair of inner seal pieces having a generally linear lower edge that forms part of said radially inner end of said vane and an upper edge having at least a sloped portion that is angled downwardly in the direction of the cam follower edge, said upper edge being contiguous with a correspondingly configured edge of said vane including a corresponding sloped portion, whereby as said inner seal pieces are urged axially apart said sloped portion of said upper edge acts against said corresponding sloped portion of the of the correspondingly configured edge of said vane to urge said inner seal piece downwardly to bring said lower end of said inner seal piece into contact with said inner housing to provide a sealing function between said vane and said inner housing

7. The improved vane of claim 6 wherein all of said upper edge of said inner seal piece defines said sloped portion.

8. The improved vane of claim 6 wherein at least one spring member under compression is disposed between said inner seal pieces to normally urge said inner seal pieces axially downwardly.

9. The improved vane of claim 2 further including an inner seal piece on each of said sections, each said inner seal piece having a generally linear lower edge that forms part of said radially inner end of said section and an upper edge having at least a sloped portion that is angled downwardly in the direction of the cam follower edge of said section, said upper edge being contiguous with a correspondingly configured edge of said section including a corresponding sloped portion, whereby as said sections and inner seal pieces are urged axially apart said sloped portion of said upper edge acts against said corresponding sloped portion of the of the correspondingly configured edge of said vane to urge said inner seal piece downwardly to bring said lower end of said inner seal piece into contact with said inner housing to provide a sealing function between said vane and said inner housing

10. An axial vane rotary device comprising:

a. a stator with a cylindrical internal chamber defined by an annular outer wall and two side walls of the stator, each said side wall having an annular cam surface;

b. a rotor rotatably mounted within said chamber, the rotor having an annular outer wall and a plurality of angularly spaced apart, axial slots extending therethrough, a vane slidably received in each said slot, each said vane comprising two sections, each of said sections being a mirror images and each including a radially inner end, a radially outer end, a cam

follower edge and an opposite edge, said opposite edges of said sections being juxtaposed, said sections being axially independently movable.

11. The improved vane of claim 10 further including an inner seal piece on each of said sections, each said inner seal piece having a generally linear lower edge that forms part of said radially inner end of said section and an upper edge having at least a sloped portion that is angled downwardly in the direction of the cam follower edge of said section, said upper edge being contiguous with a correspondingly configured edge of said section including a corresponding sloped portion, whereby as said sections and inner seal pieces are urged axially apart said sloped portion of said upper edge acts against said corresponding sloped portion of the of the correspondingly configured edge of said vane to urge said inner seal piece downwardly to bring said lower end of said inner seal piece into contact with said inner housing to provide a sealing function between said vane and said inner housing